

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: io LED

Report Number: P273331

Luminaire Tested: **0.03-1W-827-25-ID-STD-UNV-AN-3F0**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P273331
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (ITL89170-GONIOPHOTOMETRY)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: 0.03-1W-827-25-ID-STD-UNV-AN-3F0
Description: iO LIGHTING SERIES .75 LINEAR LED LUMINAIRE, 25 DEGREE OPTIC.
STANDARD OUTPUT
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 261.2 lumens
Efficiency: N/A
Efficacy: 34.8 lumens/watt
Spacing Criteria (0/90/45): 0.49 / 1.12 / 0.73
Luminous Opening: Rectangular (W 2.92' x L: 0.05' x H: 0')
CIE Type: Direct

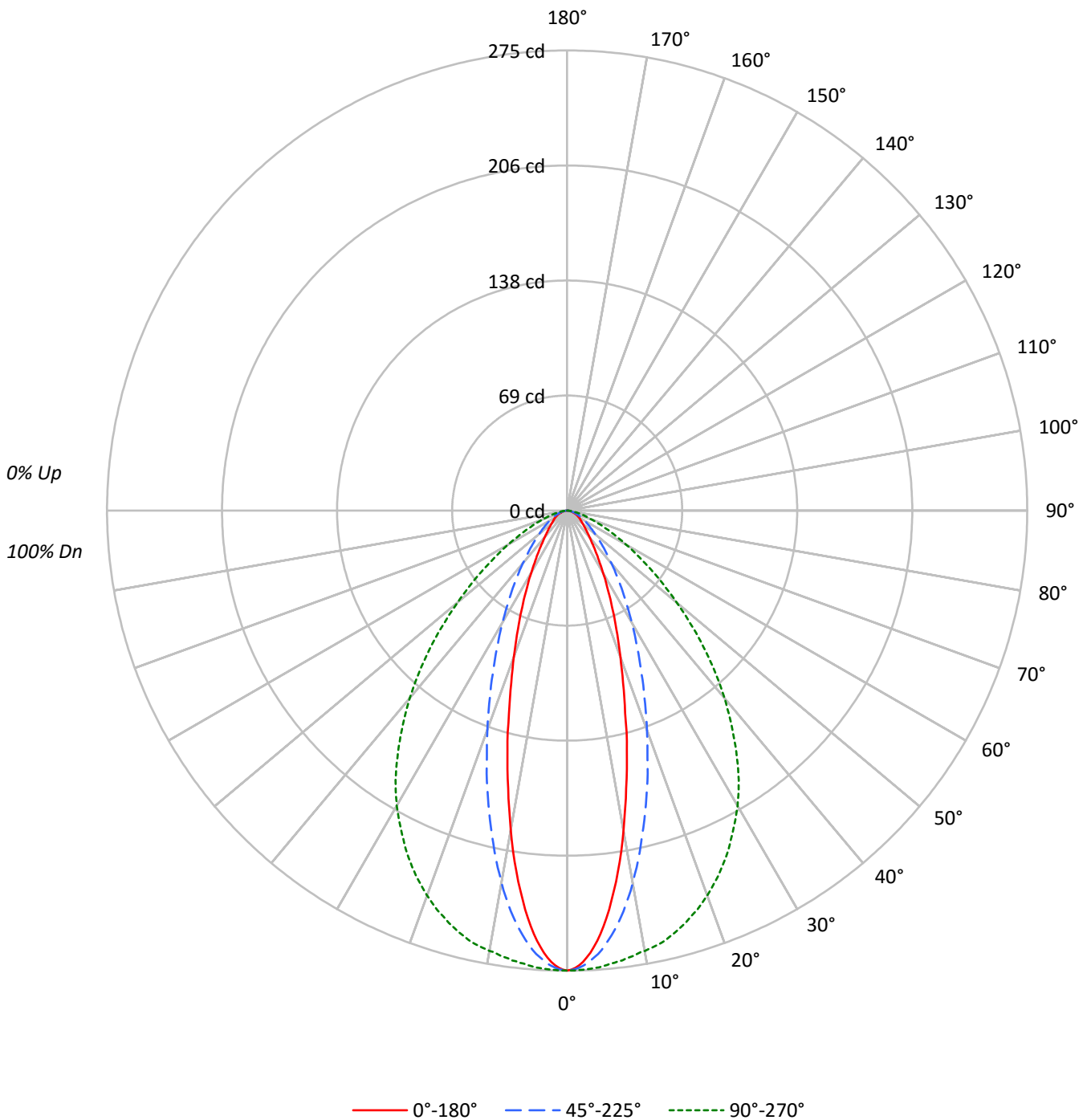
Input Watts (W): 7.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	112	108	105	102	109	106	103	101	102	100	97	98	96	95	95	93	92	90					90			
2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80					80			
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72					72			
4	91	82	75	70	89	81	74	69	78	73	69	76	72	68	74	70	67	65					65			
5	86	75	68	63	84	74	68	63	72	67	62	71	66	61	69	64	61	59					59			
6	80	70	62	57	79	69	62	57	67	61	57	66	60	56	64	60	56	54					54			
7	76	65	58	53	74	64	57	52	63	57	52	61	56	52	60	55	51	50					50			
8	72	60	53	48	70	60	53	48	59	52	48	57	52	48	56	51	48	46					46			
9	68	56	50	45	66	56	49	45	55	49	45	54	48	45	53	48	44	43					43			
10	64	53	46	42	63	53	46	42	52	46	42	51	45	42	50	45	41	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21643	21643	21643
5°	19710	20603	21544
10°	15501	18052	21361
15°	11183	14826	21086
20°	7792	11663	20510
25°	5516	9034	19659
30°	3900	7009	18518
35°	2816	5430	16935
40°	2138	4224	15026
45°	1748	3351	12838
50°	1482	2670	10472
55°	1345	2224	8318
60°	1260	1858	6393
65°	1192	1621	4825
70°	1059	1427	3614
75°	1004	1247	2738
80°	816	1043	2086
85°	723	723	1355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.8	9.1
10°-20°	52.7	20.2
20°-30°	57.0	21.8
30°-40°	48.9	18.7
40°-50°	36.1	13.8
50°-60°	23.1	8.8
60°-70°	12.7	4.9
70°-80°	5.6	2.1
80°-90°	1.2	0.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	133.5	51.1
0°-40°	182.4	69.8
0°-60°	241.6	92.5
0°-90°	261.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	261.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	275	275	275	275	275	
5°	249	253	261	269	273	22
15°	137	149	182	230	259	38
25°	64	73	104	173	226	29
35°	29	35	56	118	176	19
45°	16	18	30	73	115	12
55°	10	11	16	40	61	9
65°	6	7	9	19	26	6
75°	3	3	4	7	9	3
85°	1	1	1	1	2	1
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
0.5°	274.4	274.4	274.5	274.5	274.6	274.6	274.6	274.6	274.6	274.6	274.7
1°	273.3	273.4	273.4	273.5	273.6	273.6	273.8	273.9	274.0	274.1	274.2
1.5°	271.8	271.9	272.0	272.1	272.2	272.4	272.6	272.9	273.1	273.3	273.5
2°	270.0	270.1	270.2	270.3	270.4	270.7	271.1	271.5	271.9	272.3	272.6
2.5°	267.4	267.6	267.9	268.1	268.3	268.7	269.3	269.9	270.4	271.0	271.5
3°	264.6	264.9	265.2	265.4	265.7	266.2	267.0	267.7	268.5	269.2	270.0
3.5°	261.3	261.7	262.0	262.5	262.8	263.5	264.5	265.5	266.4	267.4	268.4
4°	257.7	258.1	258.6	259.0	259.5	260.4	261.7	263.0	264.3	265.6	266.8
4.5°	253.8	254.3	254.8	255.3	255.9	256.9	258.5	260.1	261.7	263.3	264.8
5°	249.4	250.1	250.7	251.3	252.0	253.2	255.1	257.0	258.9	260.7	262.6
5.5°	244.8	245.6	246.3	247.0	247.8	249.2	251.4	253.6	255.8	257.9	260.1
6°	239.7	240.6	241.5	242.4	243.3	245.0	247.6	250.1	252.6	255.1	257.7
6.5°	234.5	235.5	236.5	237.4	238.4	240.4	243.3	246.2	249.1	252.0	255.0
7°	229.1	230.2	231.3	232.4	233.5	235.6	238.9	242.2	245.4	248.7	252.0
7.5°	223.7	225.0	226.1	227.3	228.6	230.9	234.5	238.1	241.7	245.3	249.1
8°	217.8	219.1	220.5	221.8	223.1	225.8	229.7	233.7	237.7	241.7	245.9
8.5°	212.2	213.5	214.9	216.3	217.7	220.5	224.9	229.2	233.5	237.9	242.6
9°	206.3	207.8	209.3	210.7	212.2	215.3	220.0	224.7	229.3	234.0	239.2
9.5°	200.1	201.8	203.4	205.1	206.7	210.1	215.1	220.1	225.1	230.2	235.8
10°	193.9	195.7	197.5	199.3	201.0	204.6	209.9	215.2	220.5	225.8	232.0
10.5°	187.8	189.6	191.4	193.3	195.1	198.8	204.5	210.1	215.8	221.4	228.2
11°	181.6	183.7	185.8	188.0	190.1	194.0	199.9	205.7	211.5	217.3	224.6
11.5°	175.7	177.9	180.1	182.2	184.4	188.5	194.6	200.7	206.8	213.0	220.7
12°	169.8	172.0	174.2	176.5	178.7	183.0	189.4	195.8	202.2	208.6	216.9
12.5°	164.2	166.4	168.6	170.8	173.1	177.5	184.0	190.6	197.1	203.7	212.6
13°	158.5	160.8	163.1	165.4	167.6	172.2	179.0	185.8	192.6	199.3	208.7
13.5°	152.8	155.2	157.5	159.9	162.2	166.9	173.9	180.9	188.0	195.0	204.8
14°	147.5	149.8	152.1	154.5	156.8	161.6	168.9	176.1	183.4	190.6	200.8
14.5°	142.3	144.6	146.9	149.2	151.5	156.3	163.8	171.3	178.8	186.2	196.9
15°	137.2	139.5	141.9	144.2	146.5	151.5	159.1	166.7	174.3	181.9	192.9
16°	125.9	128.5	131.1	133.8	136.4	141.6	149.5	157.4	165.3	173.1	185.0
17°	116.9	119.5	122.0	124.6	127.2	132.5	140.4	148.4	156.4	164.4	177.0
18°	108.1	110.7	113.2	115.7	118.2	123.5	131.4	139.4	147.4	155.4	168.7
19°	100.2	102.7	105.1	107.6	110.0	115.2	123.2	131.2	139.2	147.2	161.1
20°	93.0	95.3	97.7	100.0	102.3	107.5	115.4	123.4	131.3	139.2	153.6
22.5°	76.8	78.9	81.0	83.2	85.3	90.1	97.8	105.4	113.1	120.7	135.9
25°	63.5	65.4	67.3	69.3	71.2	75.7	82.8	89.9	96.9	104.0	119.6
27.5°	52.1	53.9	55.7	57.5	59.2	63.4	70.0	76.5	83.1	89.7	105.1
30°	42.9	44.4	46.0	47.5	49.1	52.9	58.9	65.0	71.0	77.1	92.1
32.5°	35.2	36.6	37.9	39.3	40.7	44.1	49.6	55.1	60.5	66.0	80.4
35°	29.3	30.4	31.6	32.7	33.9	36.9	41.8	46.7	51.6	56.5	70.1
37.5°	24.7	25.6	26.5	27.4	28.3	30.9	35.3	39.6	44.0	48.3	60.9
40°	20.8	21.6	22.4	23.2	24.0	26.3	30.0	33.7	37.4	41.1	52.7
42.5°	18.0	18.5	19.1	19.7	20.3	22.2	25.4	28.7	31.9	35.2	45.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
45°	15.7	16.1	16.6	17.0	17.5	19.1	21.8	24.6	27.3	30.1	39.6
47.5°	13.6	14.0	14.4	14.8	15.2	16.5	18.8	21.1	23.4	25.7	34.1
50°	12.1	12.4	12.6	12.9	13.2	14.3	16.2	18.1	20.0	21.8	29.3
52.5°	10.8	11.0	11.3	11.5	11.7	12.6	14.1	15.7	17.2	18.8	25.1
55°	9.8	9.9	10.1	10.3	10.5	11.1	12.4	13.7	14.9	16.2	21.6
57.5°	9.0	9.0	9.1	9.2	9.2	9.8	10.8	11.8	12.8	13.9	18.3
60°	8.0	8.0	8.1	8.1	8.2	8.6	9.4	10.2	11.0	11.8	15.5
62.5°	7.2	7.2	7.3	7.4	7.4	7.8	8.4	9.0	9.7	10.3	13.3
65°	6.4	6.4	6.4	6.4	6.4	6.7	7.2	7.7	8.2	8.7	11.1
67.5°	5.7	5.7	5.7	5.7	5.7	5.9	6.2	6.7	7.0	7.4	9.2
70°	4.6	4.7	4.7	4.8	4.9	5.0	5.3	5.6	5.9	6.2	7.5
72.5°	3.9	3.9	4.0	4.0	4.1	4.2	4.4	4.7	4.9	5.1	6.1
75°	3.3	3.3	3.3	3.3	3.3	3.4	3.6	3.8	3.9	4.1	4.8
77.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.9	3.0	3.1	3.6
80°	1.8	1.8	1.8	1.8	1.8	1.8	2.0	2.1	2.2	2.3	2.6
82.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.5	1.7
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9
87.5°	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	274.9	274.9	274.9	274.9	274.9	274.9	274.9	274.9
0.5°	274.7	274.8	274.8	274.9	274.9	274.9	274.9	274.9
1°	274.3	274.4	274.6	274.6	274.7	274.8	274.8	274.9
1.5°	273.7	273.8	274.0	274.1	274.3	274.4	274.5	274.6
2°	272.9	273.1	273.4	273.7	273.9	274.1	274.4	274.6
2.5°	272.0	272.6	273.1	273.4	273.7	273.9	274.1	274.4
3°	270.7	271.5	272.2	272.7	273.1	273.4	273.8	274.1
3.5°	269.4	270.3	271.3	272.0	272.5	272.9	273.4	273.8
4°	268.0	269.2	270.4	271.3	271.9	272.5	273.0	273.6
4.5°	266.3	267.8	269.2	270.3	271.0	271.7	272.4	273.1
5°	264.4	266.2	268.0	269.4	270.2	271.0	271.8	272.6
5.5°	262.4	264.6	266.8	268.4	269.3	270.2	271.1	272.0
6°	260.2	262.8	265.4	267.2	268.4	269.5	270.7	271.8
6.5°	257.9	260.9	263.9	266.0	267.2	268.5	269.8	271.0
7°	255.4	258.8	262.1	264.6	266.1	267.7	269.2	270.8
7.5°	252.9	256.6	260.4	263.1	264.8	266.6	268.3	270.0
8°	250.2	254.4	258.6	261.7	263.6	265.6	267.5	269.5
8.5°	247.2	251.9	256.6	260.0	262.3	264.5	266.7	269.0
9°	244.4	249.6	254.8	258.6	261.0	263.4	265.8	268.2
9.5°	241.5	247.1	252.8	256.9	259.5	262.2	264.8	267.4
10°	238.2	244.5	250.7	255.3	258.2	261.2	264.2	267.2
10.5°	235.0	241.8	248.6	253.6	256.9	260.1	263.4	266.6
11°	231.8	239.1	246.3	251.7	255.3	258.9	262.5	266.1
11.5°	228.5	236.3	244.0	249.8	253.7	257.6	261.5	265.4
12°	225.1	233.4	241.7	247.9	252.2	256.4	260.6	264.8
12.5°	221.5	230.4	239.3	246.0	250.5	255.1	259.6	264.1
13°	218.1	227.4	236.8	243.9	248.7	253.5	258.2	263.1
13.5°	214.6	224.4	234.3	241.7	246.8	251.9	256.9	262.0
14°	211.1	221.3	231.5	239.3	244.7	250.2	255.6	261.0
14.5°	207.6	218.3	228.9	237.1	242.8	248.6	254.3	260.0
15°	204.0	215.1	226.2	234.7	240.7	246.7	252.7	258.7
16°	196.8	208.6	220.4	229.7	236.3	243.0	249.7	256.4
17°	189.5	202.1	214.7	224.5	231.8	239.1	246.3	253.5
18°	182.0	195.3	208.6	219.2	227.2	235.1	243.0	251.0
19°	174.9	188.8	202.7	213.9	222.4	230.9	239.4	247.9
20°	167.9	182.2	196.5	208.3	217.4	226.5	235.7	244.8
22.5°	151.0	166.1	181.3	194.1	204.6	215.1	225.6	236.1
25°	135.1	150.6	166.2	179.7	191.4	203.0	214.7	226.3
27.5°	120.5	135.9	151.3	165.2	177.7	190.1	202.6	215.0
30°	107.1	122.1	137.1	151.2	164.3	177.5	190.6	203.7
32.5°	94.8	109.2	123.6	137.4	150.8	164.2	177.5	190.9
35°	83.7	97.3	110.9	124.2	137.2	150.2	163.2	176.2
37.5°	73.5	86.1	98.7	111.3	123.8	136.3	148.8	161.3
40°	64.4	76.0	87.7	99.4	111.1	122.8	134.5	146.2
42.5°	56.4	67.0	77.7	88.3	98.9	109.5	120.1	130.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
45°	49.1	58.6	68.2	77.7	87.1	96.5	105.9	115.3
47.5°	42.6	51.0	59.5	67.7	75.8	83.8	91.9	99.9
50°	36.7	44.1	51.5	58.6	65.3	72.1	78.8	85.5
52.5°	31.4	37.8	44.1	50.1	55.7	61.2	66.8	72.4
55°	26.9	32.3	37.7	42.6	47.1	51.6	56.1	60.6
57.5°	22.8	27.2	31.7	35.7	39.2	42.7	46.3	49.8
60°	19.2	22.9	26.7	29.9	32.5	35.2	37.9	40.6
62.5°	16.2	19.2	22.1	24.6	26.6	28.6	30.6	32.6
65°	13.4	15.7	18.1	20.0	21.5	23.0	24.5	25.9
67.5°	11.0	12.8	14.5	16.0	17.0	18.1	19.2	20.3
70°	8.9	10.3	11.6	12.7	13.4	14.2	14.9	15.7
72.5°	7.1	8.0	9.0	9.8	10.4	10.9	11.5	12.1
75°	5.5	6.2	6.9	7.4	7.8	8.2	8.6	9.0
77.5°	4.1	4.6	5.1	5.5	5.7	6.0	6.2	6.4
80°	2.9	3.2	3.4	3.7	3.9	4.2	4.4	4.6
82.5°	1.9	2.1	2.2	2.4	2.5	2.6	2.7	2.8
85°	1.0	1.1	1.2	1.3	1.4	1.4	1.5	1.5
87.5°	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)